

COC. # 175

11720 North Creek Pkwy N, Suite 400, Bothell, WA 98011-8244 East 11115 Montgomery, Suite B, Spokane, WA 99206-4776 9405 S.W. Nimbus Avenue, Beaverton, OR 97008-7132 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711

(425) 420-9200 F^ X 420-9210 (509) 924-9200

924-9290

(503) 906-9200 FAX 906-9210 (541) 383-9310 FAX 382-7588

# **CHAIN OF CUSTODY REPORT**

Work Order #: M 10 7033

CLIENT: Bristol					INVO	ICE TO	): (E	Buist	6						TURN	NAROUN	D REQ	UEST in Bus		ays*
	Sirana ma Han											Organ	nic & Inc	organic Analyses	3					
REPORT TO: ALME +	A Teland AL	~													10	5	4	3 2	1	< 1
	as tollow ! I'm														STD.	Petrole	um Hydr	rocarbon Analys	es	
PHONE: 907 770-0	9974 FAX:	770	-09	75	P.O. N	UMBE	R:	210	90			1, 1,				5 4	3	2 1	< 1	
PROJECT NAME: Amchi	tha			1 0				ED AN		S					ST	D.		Please Specify		•
PROJECT NUMBER: 2109								1							1	ОТН		r rease speerry	,	
SAMPLED BY: (Ruh / 1)			33												*Turnar	ound Requests	less than	standard may incu	ır Rush Cha	- urges.
CLIENT SAMPLE	SAMPLING	7 2	BTEX Y	Ť											MATRIX	# OF				NCA WO
IDENTIFICATION	DATE/TIME	DR	150															COMMENT		
	1 .	+	Sam.			-									(W, S, O)	CONT.		COMMENTS	)	ID
101AMF9025L	7/14/01 /100	X	7			-			-						S	2				
201AMF903SL	7/14/01 1105	X	X												S	2				
3.																				
4.									-						2			-	-	
5.																				
		1																		
6.		-									<u>, , , , , , , , , , , , , , , , , , , </u>									4-
7.		-																		
8.							-													
9.			·. ·									-							, E	
10.														-						484
11.						, ,	, ,										<u> </u>			
12.														2						
					1					,			1 7	3						
13.		-													· · · · · · · · · · · · · · · · · · ·					2
14.	ΛΛ	-														,				
15.	A. OW						,				,,		0							
RELINQUISHED BY:					DATE:	7/11	4/01	RECEI	VED BY	: N	5/1	h	-	-			Δ.		DATE:	7/14/01
PRINT NAME: Charlie	narshall FIRM:	Brist	10		TIME:	163	0	PRINT	NAME:		5	test	wh	1,60	FIRM:	NCt	<i>f</i>	· · · · · · · · · · · · · · · · · · ·	TIME:	1630
RELINQUISHED BY:					DATE:			RECEI	VED BY	:									DATE:	
PRINT NAME:	FIRM:				TIME:			PRINT	NAME:						FIRM:				TIME:	
ADDITIONAL REMARKS:	A Company		1															TEMP:		
COC REV 3/99	1 AGT Non-	Kogi	ulat	ed	01	( P	redd	in S	stud	(			, , , , , , , , , , , , , , , , , , ,						PAGE	OF



425.420.9200 fax 425.420.9210

Spokane East 11115 Montgomery, Suite B, Spokane, WA 99206-4776

509.924.9200 fax 509.924.9290

**Portland** 9405 SW Nimbus Avenue, Beaverton, OR 97008-7132 503.906.9200 fax 503.906.9210

**Bend** 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711 541.383.9310 fax 541.382.7588

7 December, 2001

Anne Kranawetter Bristol Environmental & Engineering 2000 W International Airport C#1 Anchorage, AK 99502-1116

RE: Amchitka

Enclosed are the results of analyses for samples received by the laboratory on 07/14/01 16:30. If you have any questions concerning this report, please feel free to contact me.

This report was recreated from a previously issued final report in order to provide an electronic copy. The final report used for these electronic copies may have been previously issued as an amended report due to client requested changes to sample names, etc. No data has changed since submission of the previously issued final, or amended, report.

Sincerely,

Stephen Wilson

**Environmental Group Leader** 

1112

Work Orders included in this report:

M107033



425.420.9200 fax 425.420.9210

Spokane East 11115 Montgomery, Suite B, Spokane, WA 99206-4776

509.924.9200 fax 509.924.9290

**Portland** 9405 SW Nimbus Avenue, Beaverton, OR 97008-7132 503.906.9200 fax 503.906.9210

**Bend** 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711 541.383.9310 fax 541.382.7588

Bristol Environmental & Engineering Project: Amchitka 2000 W International Airport C#1 Project Number: 21090

**Reported:** 07/17/01 12:55

Anchorage, AK 99502-1116 Project Manager: Anne Kranawetter

#### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
01AMF902SL	M107033-01	Soil	07/14/01 11:00	07/14/01 16:30
01AMF903SL	M107033-02	Soil	07/14/01 11:05	07/14/01 16:30

COC #175

North Creek Analytical - Mobile Lab



425.420.9200 fax 425.420.9210

Spokane East 11115 Montgomery, Suite B, Spokane, WA 99206-4776

509.924.9200 fax 509.924.9290

**Portland** 9405 SW Nimbus Avenue, Beaverton, OR 97008-7132 503.906.9200 fax 503.906.9210

**Bend** 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711 541.383.9310 fax 541.382.7588

Bristol Environmental & Engineering 2000 W International Airport C#1

Project: Amchitka Project Number: 21090

Reported:

Anchorage, AK 99502-1116

Project Manager: Anne Kranawetter

07/17/01 12:55

## Diesel Hydrocarbons (C10-C25) per AK102 North Creek Analytical - Mobile Lab

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
01AMF902SL (M107033-01) Soil					Sampled: 07	/14/01 Rece	eived: 07/14/	/01	
Diesel Range Organics	11700	1500	mg/kg dry	1	AK 102	07/15/01	07/15/01	0107056	R-02
Surr: 1-Chlorooctadecane	76.3 %	50-150							
Surr: Triacontane	117 %	50-150							
01AMF903SL (M107033-02) Soil					Sampled: 07	/14/01 Rece	eived: 07/14/	/01	
<b>Diesel Range Organics</b>	8900	1500	mg/kg dry	1	AK 102	07/15/01	07/15/01	0107056	D-16,R-02
Surr: 1-Chlorooctadecane	83.9 %	50-150							
Surr: Triacontane	107 %	50-150							

North Creek Analytical - Mobile Lab

Styl Lil



425.420.9200 fax 425.420.9210

Spokane East 11115 Montgomery, Suite B, Spokane, WA 99206-4776

509.924.9200 fax 509.924.9290 **Portland** 9405 SW Nimbus Avenue, Beaverton, OR 97008-7132

503.906.9200 fax 503.906.9210 **Bend** 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711

541.383.9310 fax 541.382.7588

Bristol Environmental & Engineering Project: Amchitka 2000 W International Airport C#1 Project Number: 21090

Reported:

Anchorage, AK 99502-1116 Project Manager: Anne Kranawetter

07/17/01 12:55

# BTEX,MTBE and Naphthalene per EPA Method 8021B North Creek Analytical - Mobile Lab

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
01AMF902SL (M107033-01) Soil					Sampled: 07/1	4/01 Rece	eived: 07/14/	01	R-05
Benzene	ND	0.107	mg/kg dry	50	!1B BTEX/MTI	07/16/01	07/16/01	0107064	
Toluene	ND	0.429	"	"	"	"	"	"	
Ethylbenzene	ND	0.429	"	"	"	"	"	"	
Xylenes (total)	3.18	0.858	"	"	"	"	"	"	
Naphthalene	11.8	4.29	"	"	"	"	"	"	
Surr: 4-BFB	178 %	50-150							S-02
01AMF903SL (M107033-02) Soil					Sampled: 07/1	4/01 Rece	eived: 07/14/	01	R-05
Benzene	ND	0.0821	mg/kg dry	50	!1B BTEX/MTI	07/16/01	07/16/01	0107064	
Toluene	ND	0.328	"	"	"	"	"	"	
Ethylbenzene	ND	0.328	"	"	"	"	"	"	
Xylenes (total)	ND	0.656	"	"	"	"	"	"	
Naphthalene	ND	3.28	"	"	"	"	"	"	
Surr: 4-BFB	132 %	50-150							_

North Creek Analytical - Mobile Lab



425.420.9200 fax 425.420.9210

Spokane East 11115 Montgomery, Suite B, Spokane, WA 99206-4776

509.924.9200 fax 509.924.9290

Portland 9405 SW Nimbus Avenue, Beaverton, OR 97008-7132

503.906.9200 fax 503.906.9210 **Bend** 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711 541.383.9310 fax 541.382.7588

Bristol Environmental & Engineering Project: Amchitka 2000 W International Airport C#1 Project Number: 21090

Reported:

07/17/01 12:55

Anchorage, AK 99502-1116 Project Manager: Anne Kranawetter

# Physical Parameters per APHA/ASTM/EPA Methods North Creek Analytical - Mobile Lab

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
01AMF902SL (M107033-01) Soil					Sampled: 07/	14/01 Rece	ived: 07/14/	01	
% Solids	93.5	0.0100 %	by Weight	t 1	Gravimetric	07/15/01	07/16/01	0107063	
01AMF903SL (M107033-02) Soil					Sampled: 07/	14/01 Rece	eived: 07/14/	01	
% Solids	81.8	0.0100 %	by Weight	t 1	Gravimetric	07/15/01	07/16/01	0107063	

North Creek Analytical - Mobile Lab



425.420.9200 fax 425.420.9210

Spokane East 11115 Montgomery, Suite B, Spokane, WA 99206-4776

509.924.9200 fax 509.924.9290 **Portland** 9405 SW Nimbus Avenue, Beaverton, OR 97008-7132

503.906.9200 fax 503.906.9210

**Bend** 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711 541.383.9310 fax 541.382.7588

Bristol Environmental & Engineering 2000 W International Airport C#1

Project: Amchitka
Project Number: 21090

Reported:

Anchorage, AK 99502-1116

Project Manager: Anne Kranawetter

07/17/01 12:55

### Diesel Hydrocarbons (C10-C25) per AK102 - Quality Control

### North Creek Analytical - Mobile Lab

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

					, , , , , , ,				
Batch 0107056 - 3545 ASE									
Blank (0107056-BLK1)			Prepare	d & Analy	yzed: 07/1	5/01			
Diesel Range Organics	ND	150 mg/kg wet							
Surr: 1-Chlorooctadecane	22.1	"	23.7		93.2	50-150			
Surr: Triacontane	22.4	"	23.5		95.3	50-150			
LCS (0107056-BS1)			Prepare	d & Analy	yzed: 07/1	5/01			
Diesel Range Organics	1120	150 mg/kg wet	1250		89.6	75-125			
Surr: 1-Chlorooctadecane	25.6	"	23.7		108	50-150			
Surr: Triacontane	23.8	"	23.5		101	50-150			
LCS Dup (0107056-BSD1)			Prepare	d & Analy	yzed: 07/1	5/01			
Diesel Range Organics	1340	150 mg/kg wet	1250		107	75-125	17.9	20	
Surr: 1-Chlorooctadecane	17.5	"	23.7		73.8	50-150			
Surr: Triacontane	21.3	"	23.5		90.6	50-150			
Matrix Spike (0107056-MS1)	Sour	ce: M107030-01	Prepare	d & Analy	yzed: 07/1	5/01			
Diesel Range Organics	1530	150 mg/kg dry	1330	ND	114	60-140			
Surr: 1-Chlorooctadecane	16.9	"	25.2		67.1	50-150			
Surr: Triacontane	24.0	"	25.0		96.0	50-150			

North Creek Analytical - Mobile Lab



Seattle 11720 North Creek Pkwy N, Suite 400, Bothell, WA 98011-9223 425.420.9200 fax 425.420.9210

Spokane East 11115 Montgomery, Suite B, Spokane, WA 99206-4776 509.924.9200 fax 509.924.9290

Portland 9405 SW Nimbus Avenue, Beaverton, OR 97008-7132 503.906.9200 fax 503.906.9210

Bend 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711 541.383.9310 fax 541.382.7588

110

50-150

Bristol Environmental & Engineering 2000 W International Airport C#1

Project: Amchitka Project Number: 21090

Reported: 07/17/01 12:55

Anchorage, AK 99502-1116

Project Manager: Anne Kranawetter

#### BTEX,MTBE and Naphthalene per EPA Method 8021B - Quality Control

### North Creek Analytical - Mobile Lab

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

Batch	. 0107064 -	MeOH	Extraction
-------	-------------	------	------------

Surr: 4-BFB

Blank (0107064-BLK1)				Prepared & A	Analyzed: 07/1	6/01
Benzene	ND	0.0250 n	ng/kg wet			
Toluene	ND	0.100	"			
Ethylbenzene	ND	0.100	"			
Xylenes (total)	ND	0.200	"			
Naphthalene	ND	1.00	"			
Surr: 4-BFB	2.61		"	2.50	104	50-150
LCS (0107064-BS1)				Prepared &	Analyzed: 07/1	6/01
Benzene	2.39	0.0250 n	ng/kg wet	2.50	95.6	69-138
Toluene	2.53	0.100	"	2.50	101	53-151
Ethylbenzene	2.52	0.100	"	2.50	101	61-141
Xylenes (total)	7.73	0.200	"	7.50	103	62-141
Naphthalene	3.09	1.00	"	2.50	124	65-135

2.50

2.76

North Creek Analytical - Mobile Lab



Reported:

425.420.9200 fax 425.420.9210

Spokane East 11115 Montgomery, Suite B, Spokane, WA 99206-4776

509.924.9200 fax 509.924.9290

Portland 9405 SW Nimbus Avenue, Beaverton, OR 97008-7132

503.906.9200 fax 503.906.9210 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711 541.383.9310 fax 541.382.7588

Bristol Environmental & Engineering Project: Amchitka 2000 W International Airport C#1 Project Number: 21090

Anchorage, AK 99502-1116 Project Manager: Anne Kranawetter 07/17/01 12:55

#### **Notes and Definitions**

D-16	Detected hydrocarbon	s in the diesel do no	t have a distinct diesel patt	ern and may be due to h	eavily weathered diecel

R-02 The reporting limit for this analyte was raised due to the high analyte concentration present in the sample.

R-05 Reporting limits raised due to dilution necessary for analysis.

S-02 The surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic compounds

present in the sample.

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis. MRLs are adjusted if %Solids are less than 50%.

wet Sample results reported on a wet weight basis (as received)

RPD Relative Percent Difference

North Creek Analytical - Mobile Lab

### **Items for Project Manager Review**

LabNumber	Analysis	Analyte	Exception
			Report recreated from: \\sisters\elmnt\Report\M107033 FINAL 07 17 01 1255.mdb
			Default Report (not modified)
M107033-01	8021B BTEX/MTBE/N	4-BFB	S-02
M107033-01	8021B BTEX/MTBE/N		R-05
M107033-01	8021B BTEX/MTBE/N	4-BFB	Exceeds upper control limit
M107033-01	AK102 (DRO)	Diesel Range Organics	R-02
M107033-02	8021B BTEX/MTBE/N		R-05
M107033-02	AK102 (DRO)	Diesel Range Organics	R-02
M107033-02	AK102 (DRO)	Diesel Range Organics	D-16